# Exhibit D

#### IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF TEXAS TYLER DIVISION

Intellectual Ventures II LLC,  Plaintiff,  v.  Bitco General Insurance Corp., f/k/a, Bituminous Casualty Corp.; and Bitco National Insurance Co., f/k/a Bituminous Fire and Marine Insurance Co.,  Defendants.	<i>\$\tau\$</i> \$\tau\$ \$\tay\$	Case No. 6:15-CV-59-JRG LEAD CASE
Intellectual Ventures II LLC,  Plaintiff,  v.  Great West Casualty Company,  Defendant.	<i>® ® ® ® ® ® ® ® ® ®</i>	Case No. 6:15-CV-60-JRG

### EXPERT REPORT OF HUGH SMITH, PH.D. ON INFRINGEMENT BY GREAT WEST

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#### I. Introduction

#### A. Retention

1. My name is Hugh Smith. I was retained by Nix, Patterson & Roach, LLP, counsel for Intellectual Ventures I LLC and Intellectual Ventures II LLC ("Intellectual Ventures"), Plaintiff in the above- captioned lawsuit against Great West Casualty Company ("Great West"). My objective is to provide an independent assessment of whether Great West infringes claim 14 of United States Patent No. 7,516,177 ("the '177 Patent"). This Report contains my infringement analysis.

#### B. Summary of Opinions

2. It is my opinion that Great West's system, as described in Attachment 3, directly infringes claim 14 of the '177 patent. All of the opinions stated in this report are based on my current personal knowledge and professional judgment; if called as a witness during the trial in this matter, I am prepared to testify about them. If I am asked to testify at trial in this matter, I may prepare demonstratives and exhibits to help present my opinions to the Court and to the jury

#### C. Qualifications

- 3. My qualifications for forming the opinions set forth in this report are described in detail in my curriculum vitae ("CV") (Attachment 1). My CV includes a list of the cases in which I have testified at deposition, hearing, or trial during at least the past four years.
- 4. I received a Ph.D. in Computer Science from Michigan State University in 1999. I also hold a Master's Degree in Computer Science from Michigan State University, which I received in 1994, and a Bachelor's degree in Computer Science from Xavier University, which I received in 1985.

- 5. For over 30 years, I have been active in the fields of computer science and computer engineering. During my career, I have been involved with many technologies related to the patent asserted in this case, including the development of both hardware and software. My research and teaching interests include distributed systems, software development, system programming, embedded systems and computer networks. My Ph.D. thesis was titled "Multicast Videoconferencing over Internet Style Networks". I have developed and taught computer networking courses at both the undergraduate and graduate level.
- 6. I am a tenured Full Professor in the Department of Computer Science at California Polytechnic State University ("Cal Poly"). I have been employed by Cal Poly since 2000. I was the Director of the Computer Engineering Program at Cal Poly for five years. I have been awarded a number of distinctions while on the faculty at Cal Poly, including the Computer Science Professor of the Year in 2006 and the Computer Engineering Program Instructor of the Year in 2002. In addition to computer networking courses, I have taught undergraduate courses in introductory programming, embedded systems, robotics and digital design (computer design and assembly language programming).
- 7. I have also taught at Michigan State University. From 1992-1996, I served as a Teaching Assistant in the Department of Computer Science and Engineering teaching courses in Object Oriented Programming and Computer Architecture. In 1998, I served as an Instructor in this department teaching the "Algorithms and Computing" course which covered an introduction to computer science and programming in C++.
- 8. I developed and released the Android App Lockmenu. I managed the design, implementation, testing, and marketing for the Lockmenu App.
  - 9. I have also served in an engineering capacity for large corporations. Notably, I was

employed by Procter and Gamble from 1985-1992, first as a Systems Analyst and later as a Group Manager, and worked on all aspects of a large distributed Purchasing and Inventory Control system.

#### D. Person of Ordinary Skill in the Art (POSITA)

- 10. I understand that, in interpreting a patent, the disclosure and claims must be viewed from the standpoint of a person of ordinary skill in the art (POSITA) as of the effective filing date set forth above.
- 11. My opinion of the level of ordinary skill in the art is based on my personal experience working and teaching in the fields of electrical engineering and computer science, my knowledge of colleagues and others working in that general field during the relevant time period, my study of the Asserted Patents and their file histories, and my knowledge of:
- the level of education and experience of persons actively working in the field at the time the subject matter at issue was developed;
  - the types of problems encountered in the art at the time the subject matter was developed;
  - prior-art solutions to these problems;
  - the activities of others working in the field;
  - prior attempts to solve the problems addressed by the relevant art; and
  - the sophistication of the technology at issue in this case; and
  - the speed at which innovations are made
- 12. I have also been informed that these factors are not exhaustive but merely serve as a useful guide in determining the level of ordinary skill in the art.

13. Having considered the above factors as well as my own education and experience, it is my opinion that a POSITA with respect to the Asserted Patent would have a Bachelor's degree in Electrical Engineering, Computer Science, or Computer Engineering and approximately two to three years of experience a related field. Additional relevant graduate education could substitute for professional experience, and significant work experience could substitute for formal education.

#### E. '177 Patent Background

- 14.. The '177 Patent names John Knapp and Edward Snyders as inventors and is titled "Apparatus for Distributing Content Objects to a Personalized Access Point of a User Over a Network-Based Environment and Method."
- 15. Based on the face of the '177 Patent, the application that issued as the '177 Patent was filed on June 27, 2004, and has an earliest effective filing date at least as early as May 11, 2000, when the parent application that issued as U.S. Patent No 6,799,010 was filed.

#### F. Materials Relied Upon

- 16. While doing my analysis and forming my conclusions for this Report, I have reviewed numerous documents and materials, including publicly available information deemed pertinent to the issues at hand. The materials I reviewed are detailed in Attachment 2 to this report. Among the materials I reviewed and relied upon were at least the following:
  - a United States Patent No. 7,516,177 (referred to as the '177 Patent throughout this Report) and its file history;
  - b. The Report and Recommendation of United States Magistrate Judge Mitchell in *Intellectual Ventures I, LLC, et al. v. HCC Insurance Holdings, Inc., et al.*; 6:15-cv-660, entered as Dkt. No. 102 (filed August 26, 2016) (hereafter the "*Markman* Order" or "Claim Construction Order");

c. The Memorandum Opinion and Order of United States District Judge Rodney Gilstrap in this case, entered as Dkt. No. 116; (filed January 11, 2016) (hereafter the "*BITCO* Order");

d. Pleadings and orders in the five *inter partes* reviews as to the '177 patent, including those in IPR2015-01706, IPR2015-01707, IPR2016-00453, IPR2016-01434, and IPR2016-01534;

e. The discovery responses from Great West in this litigation;

f. Documents produced by Great West;

g. Deposition testimony and exhibits of Great West's witnesses, including:

i. Jim Arends: 09-30-2015

ii. Brian Foote: 01-28-2016

Brian Foote (as 30(b)(6) witness): 01-27-2016.

#### **G.** Future Opinions

17. I expect that I may be asked to supplement this Report and the opinions provided herein if and when I am provided additional information pertinent to my opinions or based on additional research on my own premised on any materials I have not yet had an opportunity to review. Additionally, I understand that Great West may offer opinions as part of their reports related to so-called "non-infringing alternatives." It is my understanding that Great West has the burden to show that an alleged alternative would be non-infringing, acceptable, viable, and available at the time of the hypothetical negotiation. If Great West offers an opinion regarding alleged non-infringing alternatives, I expect to provide an opinion addressing technical aspects of that alleged alternative, upon which I understand that damages experts in this case may base a part of their opinions.

#### II. Methodology and Qualifications

- 18. All of the opinions provided in this Report are supported as follows:
  - a. My opinions expressed herein are based upon sufficient facts and data to allow me to reach the opinions contained in this Report;
  - My opinions expressed herein are the product of reliable principles and methods;
  - c. My opinions expressed herein constitute a reliable application of those principles and methods to the facts of this case; and
  - d. My opinions expressed herein are based upon information of a type reasonably relied upon by experts in the applicable arts (e.g., technical dictionaries, technical descriptions, technical publications, schematics, system architecture diagrams, technical manuals, patent disclosures, and patent claims) and analogous to the '177 Patent.
  - e. My education, training, and experience, as evidenced by my *curriculum vitae* (Attachment 1), qualify me to submit the opinions provided in this Report. I am compensated at an hourly rate of \$600. My compensation is not dependent upon the opinions I reach or the outcome of any issue in this case.
- 19. This Report describes infringement of claim 14 of the '177 Patent based on the information I have reviewed. The process I followed in performing my infringement analysis of the Great West systems was to first review the language in the relevant claim as it occurred in the '177 Patent, followed by application of the Court's *Markman* Order as it related to the claim terms I analyzed and of the terms construed by the Patent Trial and Appeal Board in the '177 Patent *inter partes* proceedings. With this foundation for my analysis, I then reviewed the

materials cited above. I next analyzed the Great West systems. Having found infringement, I then demonstrated how each element of claim 14 is infringed. Attachment 3 contains a thorough presentation of my analysis supporting my conclusions of infringement.

#### III. Legal Standards Applied in This Report

- 20. I am not an attorney and will not offer opinions on the law. I have been informed, however, of certain legal principles that are to be applied in determining infringement. The legal principles that I have applied in reaching the conclusions and opinions in this report are set forth below.
- 21. I understand that a patent infringement determination is a two-step process, which involves:
  - properly construing the Asserted Claims to determine their scope and meaning; and
  - comparing the construed claims to an accused product to determine whether each limitation of the Asserted Claims is present in the accused product.
- 22. It is my understanding that the second step in an infringement analysis involves a determination of whether the accused products contain the elements that correspond to each limitation in an asserted claim. If the accused product contains or embodies each of the elements of an asserted claim as properly construed, the product infringes that claim "literally."

#### A. Direct Infringement

23. I have been instructed by Intellectual Ventures' counsel that, under the United States Patent Laws, whoever makes, uses, sells, or offers to sell within the United States, or imports into the United States a patented system or method without authority is liable for patent infringement. I am told that where one party infringes all element of a given patent claim, it is referred to as direct infringement. Additionally, I have been told that a method claim can be directly infringed where one party—although not performing all steps of the claimed method or

process—exercises direction or control over the entire method or process. Similarly, I have been instructed that a system claim may be directly infringed where one party "uses" the system or places it into service, even though parts of the system may be under the supervision of another party, as long as the accused party receives an intended benefit of the infringing system.

#### IV. Infringement Summary

24. An overview of the system deployed and utilized by Great West is set out in Attachment 3. For the reasons stated in Attachment 3, setting out my full analysis of the Great West accused system in view of Claim 14 of the '177 Patent, and based on my experience and my review of the materials described and detailed herein and in Attachments 2 and 3, I conclude that Great West directly infringes Claim 14 of the '177 Patent, which provides as follows:

#### Claim 14 of the '177 Patent:

11. An apparatus for distributing content through one or more distributed information access points to a centralized access point of a user, comprising:

at least one server operative to store one or more of: a) content, b) links to content, c) information about content, and d) information about users including information about which content a user has chosen;

a centralized access point of a user accessible via a communications link and operative to provide the user with access to content chosen by or for the user

at least one distributed information access point accessible via a communications link and operative to implement one or more of: a) list one or more content objects, b) allow a user to choose content for addition to their centralized access point, and c) provide the user with logon access to their centralized access point; and

an administrative interface in communication with the server and operative to create groupings of content into one or more distributed information access points;

wherein a user is enabled with the capability to log on to their centralized access point from one or more distributed information access point(s) and access content chosen from one or more distributed information access

point(s).

- 14. The apparatus of claim 11 wherein the centralized access point is further operative to enable a user to manage any content contributed by them.
- 25. I may be called upon to testify at trial in this case. In the event I do testify at trial, I will create materials and possibly provide a live demo that will help present my opinions to the Court.

#### V. Attachments to This Report

Attachment 1—CV, publications, and list of cases

Attachment 2—Materials Reviewed

Attachment 3 - Claim Chart

76-le \$ 10/19/2018

## **ATTACHMENT 1**

Hugh M. Smith, Ph.D.

hms@husmith.com (805) 595-1506

#### I. Education

Ph.D. in Computer Science November 1999

<u>Michigan State University</u>, College of Engineering

Dissertation Title: Multicast Videoconferencing over Internet Style Networks

Masters of Science in Computer Science, December 1994 Michigan State University, College of Engineering Research Focus: Parallel and Distributed Computing

Bachelors of Science in Computer Science, May, 1985 Xavier University, College of Arts and Science

#### **II.** Academic Experience:

9/16-6/17, 9/09 – 6/13, Director of the Cal Poly Computer Engineering Program

• Associate Director of the Computer Engineering Program, 2007-2009

1/00 – Present, Department of Computer Science, California Polytechnic State University

- Tenured Full Professor in the Department of Computer Science
- Awarded the Computer Engineering Program Most User Friendly Award ("In recognition of your commitment and dedication to student success), 2015
- Awarded the Computer Science Department Professor of the Year, 2006
- Awarded the College of Engineering/TRW Teaching in Excellence award, 2002.
- Awarded the Computer Engineering Program Instructor of the Year, 2002.
- Awarded the Computer Engineering Program Lab Instructor of the Year, 2001.
- Laboratory Manager for the Cal Poly Advanced Networking Laboratory, 2001-2007
- Developed and taught the senior level Computer Networks I and Networks II courses.
  Course activities included the theoretical aspects of computer networks, security, wired
  and wireless networks, and the implementation of protocol layers from the physical to
  application layer. Courses include reinforcement of these concepts through socket
  programming and hands-on networking experience (routers/switches) in Cal Poly's
  Advanced Networking Laboratory.
- Developed and taught the Graduate Level Computer Networks course. This course involves the study and analysis of the theory and implementation of both academic and industry research of computer networks.
- Taught the Introduction to Computer Science, System Programming, and Digital Electronics Computer Engineering Program courses.

5/98 – 7/98, Instructor, Department of Computer Science and Engineering, Michigan State University

- Taught the "Algorithms and Computing" course, which covered an introduction to computer science and programming in C++.
- 9/92 5/96, Teaching Assistant, Department of Computer Science and Engineering, Michigan State University
  - Courses included Object Oriented Programming and Computer Architecture

#### **III. Professional Experience:**

- 3/10 6/13, Android Mobile Phone App Development
  - Developed and released the Android App *Lockmenu* (www.lockmenu.com)
  - Managed the design, implementation, testing, marketing and patent submission for the *Lockmenu* app.
- 12/03 present, Intellectual Property Consulting
  - Worked as a IP Expert Witness on hardware and software related cases. Work included both infringement and invalidity analysis.
  - Wrote expert reports and testified in both depositions and trials
- 7/00 8/00, Faculty Employment, Cisco Systems
  - Responsibilities included development of a process for setting up Advanced Networking Labs at teaching universities.
- 9/95 5/98, Research Assistant, Department of Computer Science and Engineering, Michigan State University
  - Researched issues involved in the transmission and control of multicast video over heterogeneous networks.
  - Addressed issues in controlling multicast video using various compression algorithms (MPEG, Motion JPEG) over ATM and Ethernet networks.
- 5/93 8/93, Research Assistant, Department of Computer Science and Engineering, Michigan State University
  - Researched issues in developing AI systems to provide real-time diagnostics tools.
- 5/85 8/92 The Procter and Gamble Company, Cincinnati, Ohio
  - 9/90 8/92, Group Manager,
  - 5/89 9/90, Senior Systems Analyst/Project Manager
  - 5/85 5/89, Systems Analyst
  - Managed all aspects of a large distributed Purchasing and Inventory Control system, which included over 2,000 users, processed over \$250 million in yearly purchases, and tracked over \$60 million in inventory.
  - Managed five-person support team that involved recruiting, training, performance appraisals and development plans.
  - Led a division wide effort as a Project Manager to develop a decentralized quality monitoring information system.

- Coordinated hardware and software upgrades, capacity planning, and on-going maintenance as a computer System Manager.
- 5/83 5/85, Programmer Analyst, Merrell Dow Research Institute, Cincinnati, Ohio
  - Responsible for system development and support.

#### IV. Research related activities

- Presented the paper titled: *An Embedded System Design Experience for First Year Computing Majors*, at the 8<sup>th</sup> annual FYEE Conference, Columbus Ohio, August 2016.
- Patent application: Systems and methods for deterministic control of instant-on mobile devices with touch screens, US 20120060123 A1
- Presented the paper titled: *Microcontroller Based Introduction to Computer Engineering*, at the 7<sup>th</sup> annual FYEE Conference, Roanoke VA, August 2015.
- Presented the paper titled: *Toward a common host interface for network processor* at the 2003 IASTED International Conference on Communications, Internet, & Information Technology (CIIT) Scottsdale, AZ, November 2003.
  - Conference session chair for the "Information Systems and the Internet III Systems Architectures" session
- General Conference Program Committee, IEEE International Conference on Communications (ICC), 2003
- Presented the paper titled: Effective Call Admission Control for Video Phone Applications at the International Conference on Networking (ICON'03) in Sydney Australia, September 2003.
- Presented the paper titled: Feedback Scalability for Multicast Videoconferencing at the International Conference on Networking (ICN'01) in Colmar France in July 2001.
- Presented the paper titled: Fair Link Sharing with Layered Multicast Videoconferencing at the IEEE GLOBECOM in San Francisco in November 2000.
- Presented the paper titled: *Pattern Smoothing for Compressed Video Transmission* at the IEEE International Conference on Communications (ICC '97) in Montreal Canada in June 1997.
- Patent Application titled: "Systems and Methods for Deterministic Control of Instant-On Mobile Devices with Touch Screens", Serial no. 13/222,337

#### **Publications**

Smith, H., *Network Programming – Beyond Sockets*, Proceedings of the 2016 ASEE Rocky Mountain Section Conference, Cedar City UT, September 2016.

Smith, H,. *An Embedded System Design Experience for First Year Computing Majors*, Proceedings of the 8<sup>th</sup> annual FYEE conference, Columbus OH, August 2016.

Smith, H., *Microcontroller Based Introduction to Computer Engineering*, Proceedings of the 7<sup>th</sup> annual FYEE Conference, Roanoke VA, August 2015.

Lydon, S., and Smith, H., *General Direction Routing Protocol*, Proceedings of the 2008 IASTED International Conference on Sensor Networks, September 2008, Crete Greece.

Piratla, N., Jayasumana, A. and Smith, H., *Overcoming the Effects of Correlation in Packet Delay Measurements Using Inter-Packet Gaps*, Proceedings of the IEEE International Conference on Networks (ICON'04), November 2004, Singapore.

Kredo, K., Liddicoat, A., Smith, H. and Nico, P., *A Flexible Platform for Network Processing*, Proceedings of the 2004 IASTED Communications and Computer Networks conference, November 2004, Boston MA.

Wang, M. and Smith, H., *Using Heuristics to Select the Root Bridge of a Spanning Tree in a Bridging Algorithm*, Accepted to appear in the 2004 IASTED International Conference on Communications, Internet and Information Technology (CIIT 2004), November 2004.

E. Hawkins, P. Nico, and H. Smith. *Toward a common host interface for network processors*. Proceedings of the 2003 IASTED International Conference on Communications, Internet, & Information Technology (CIIT), pages 689-694, Scottsdale, AZ, November 2003.

Hatalsky, P., Smith, H. and Carlton, M., *Effective Call Admission Control for Video Phone Applications*, Proceedings of the IEEE International Conference on Networks (ICON'03), Sydney Australia, September 2003

Hatashita, J., Harris, J., Smith, H. and Nico, P., *An Evaluation Architecture for a Network Coprocessor*, Proceedings of the 2002 IASTED International Conference on Parallel and Distributed Computing and Systems (PDCS), Cambridge, Massachusetts, November 2002.

Hatalsky, J., Murarka, N., Hatalsky, P. and Smith, H., *Implementation of Fair Link Sharing Through Modification of the Linux Kernel*, Proceedings of the International Conference on Communications (ICC'02), New York, NY, April 2002.

Smith, H., Mutka, M. and Yang, L., *Feedback Scalability for Multicast Videoconferencing*, Proceedings of the International Conference on Networks, Colmar, France, July 2001.

Smith, H. and Mutka, M., Fair Link Sharing with Layered Multicast Videoconferencing, Proceedings of the IEEE GLOBECOM 2000, San Francisco, CA, November 2000.

Dr. Hugh M. Smith

H. Smith, M. Mutka and E. Torng, "Bandwidth Allocation for Layered Multicast Video", Proceedings of the IEEE International Conference on Multimedia Computing and Systems, Florence Italy, June 1999.

Smith, H., Mutka M. and Rover, D., *A Feedback Based Rate Control Algorithm for Multicast Videoconferencing*, Journal of High Speed Networks, Vol. 7, No. 3-4, pp. 259-279, 1998

Smith, H. and Mutka, M., *Pattern Smoothing for Compressed Video Transmission*, Proceeding of the IEEE International Conference on Communications (ICC '97), June 1997.

Waheed, A., Rover, D., Mutka, M., Smith, H. and Bakic, A., *Modeling, Evaluation, and Adaptive Control of an Instrumentation Systems*, in Proceedings of the IEEE Real-Time Technology and Applications Symposium (RTAS '97), pp. 100-110, June, 1997

Articles published in Network Computing Magazine

- Sneak Preview of the IPolicy Networks ipEnforcer, April 2004
- Product Review of SOHO All-in-one Security Devices, March, 2004
- Sneak Preview of the ImageStream TransPort router, February 2004
- Sneak Preview of the F5 Firepass 1000 SSL VPN, December 2003.

Hugh M. Smith, Ph.D.

hms@husmith.com (805) 595-1506

#### Testified as an expert at trial or by deposition:

- Intellectual Ventures vs. Netapp. Case involves memory management in symmetric multiprocessor systems. IPR (Hired by IV) (2017) Deposition December 13, 2017.
- Core Wireless Licensing vs. LG Electronics. Case involves cellular telephone technologies and the Multimedia Messaging Service. (Hired by Core Wireless)
   Deposition December 14, 2015 (2015-2016)
- BMC Software, Inc. vs. ServiceNow, Inc. Case involves data center management software (Hired by BMC) Deposition December 7, 2015 (2015-2016)
- Kinglite Holdings, Inc vs. American Megatrends Inc (AMI). Case involves networked BIOS technology. IPR case. (Hired by AMI) Deposition January 18, 2016 (2014-2016)
- Good Technology vs. MobileIron and Airwatch. Case involves mobile phone data security. (Hired by: Good Technologies) Depositions February 22-23, 2015; March 28-29, 2015. Testified at trial in San Jose CA July 21-23 and July 30, 2015. (2013-2015)
- TuitionFund vs. SunTrust Banks, Inc., et al. Case involves processing of rebates from credit and debit cards. (Hired by: TuitionFund) Wrote infringement report. Deposition January 5, 2014. (2013-2014)
- Intellectual Ventures LLC vs. Motorola Mobility, *et al.* Cases involve MMS on mobile devices and QOS on Wi-Fi networks. (Hired by: Intellectual Ventures) Wrote infringement report, invalidity rebuttal report and reexamination declaration. Deposition July 24, 2013, Testified at trial in Wilmington DE March 2015. (2012-2017)
- Safe Gaming System, Inc. vs. Ontario Lottery and Gaming Corporation *et al*. Case involved on-line gambling systems. Canadian Case. Testified at trial in Toronto, Canada June 26-29, 2017 (Hired by: Safe Gaming System, Inc.) (2012-2017)

9/11/18 (1)

#### **Attachment 2**

**Information Considered in Forming Opinions in Expert Report** 

Hugh Smith, Ph.D.

### **Information Considered by Hugh Smith, Ph.D. in Forming Opinions in Expert Report**

United States Patent No. 7,516,177 B2

United States Patent No. 7,516,177 B2 File History

The Memorandum Opinion and Order of United States District Judge Rodney Gilstrap in this case, entered as Dkt. No. 116; (filed January 11, 2016)

The Report and Recommendation of United States Magistrate Judge Mitchell in *Intellectual Ventures I, LLC, et al. v. HCC Insurance Holdings, Inc., et al.*; 6:15-cv-660, entered as Dkt. No. 102 (filed August 26, 2016)

Great West Defendants' Final Non-Infringement Chart

Intellectual Ventures' Infringement Contentions

Great West Defendants' Responses and Supplemental Responses to Common and Non-Common Interrogatories

Great West Initial and Supplemental Disclosures

Pleadings and orders in the five *inter partes* reviews as to the '177 patent, including those in IPR2015-01706, IPR2015-01707, IPR2016-00453, IPR2016-01434, and IPR2016-01534

All claim construction briefing, tutorials, transcripts & charts

Intellectual Ventures Responses to Common and Non-Common Interrogatories and amendments thereto

Deposition Transcript – Jim Arends (September 30, 2015) and exhibits

Deposition Transcript – Brian Foote 30(b)(6)( January 27, 2016) and exhibits

Deposition Transcript – Brian Foote (January 28, 2016) and exhibits

Deposition Transcript – Steven Ponder (May 13, 2015) and exhibits

Deposition Transcript – Steven Ponder (March 29, 2016) and exhibits

Deposition Transcript – Michael Flannery (May 13, 2015) and exhibits

Deposition Transcript – Dena Cochran (January 29, 2016) and exhibits

Deposition Transcript – Brian Mitchell (February 26, 2016) and exhibits

Deposition Transcript – Edward Snyders (January 30, 2016) and exhibits

Deposition Transcript – John Knapp (February 21, 2016) and exhibits

GWCC-IV-1-4897

GWCC-IV-4898-6233

GWCC-IV-6234-35974

GWCC-IV-35975-36101

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GWCC-IV-135987-149719

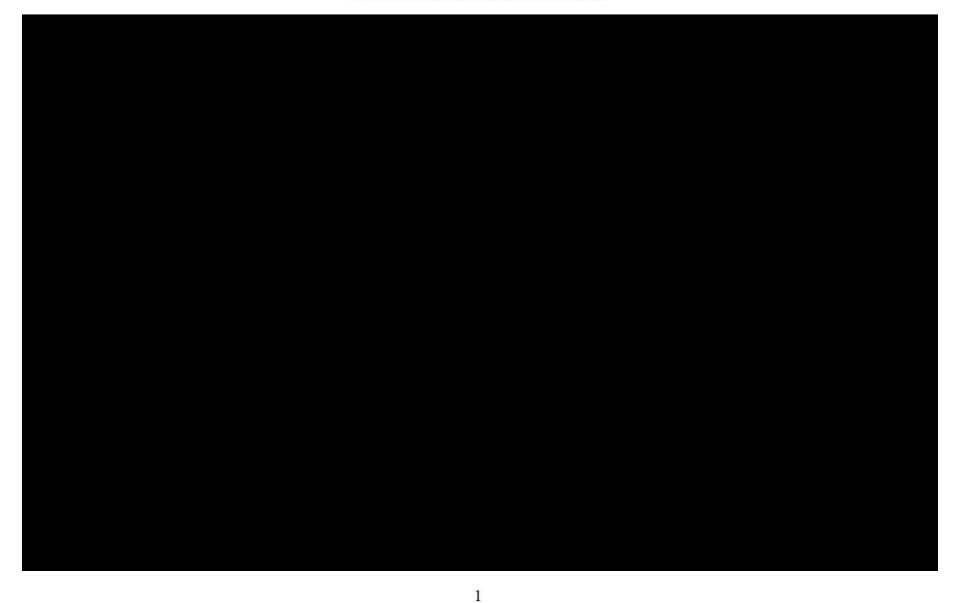
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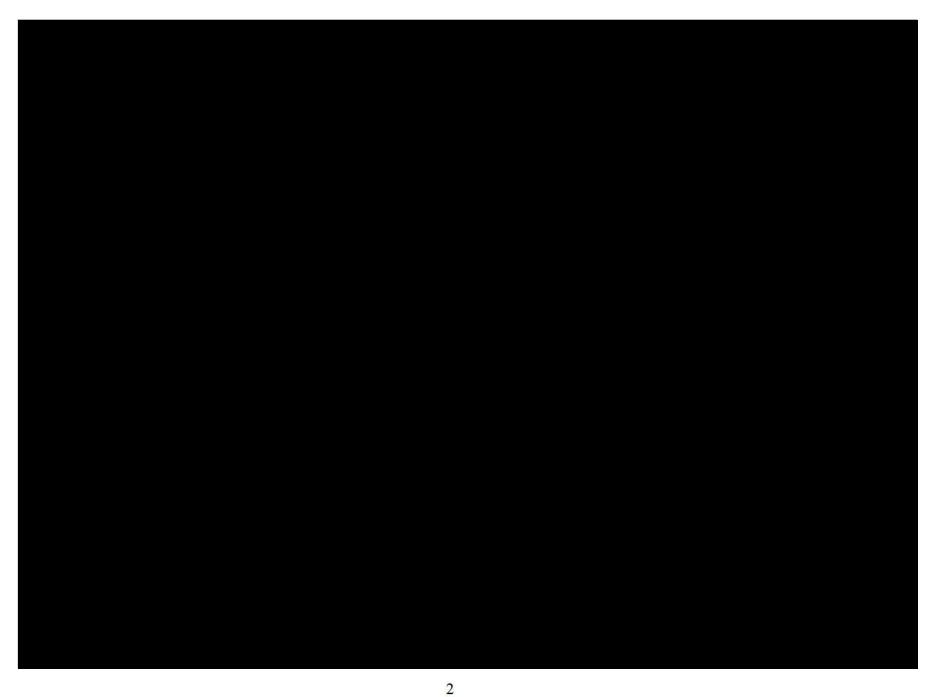
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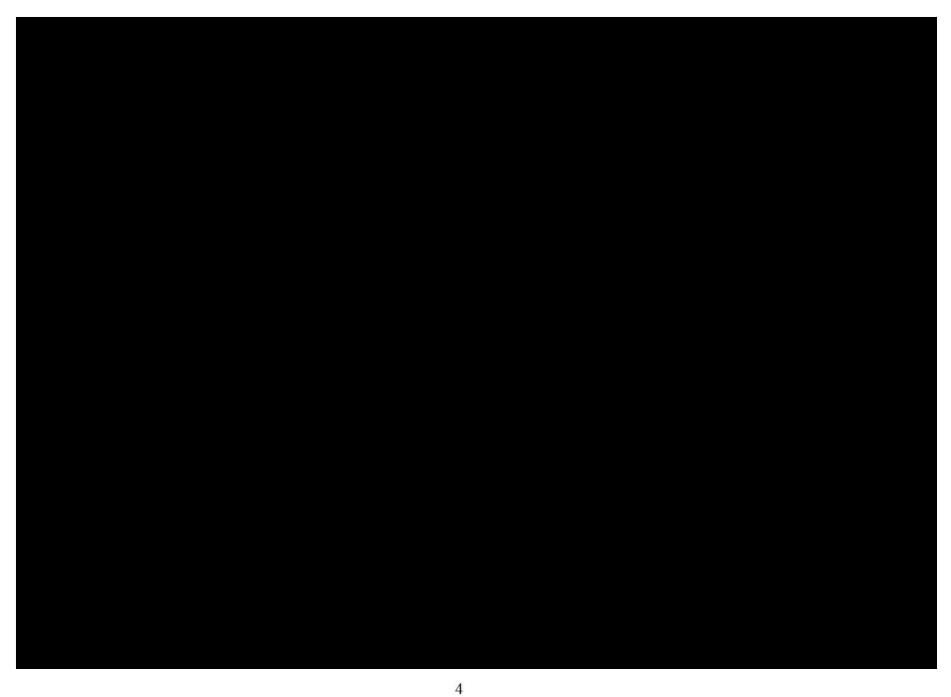
## **ATTACHMENT 3**

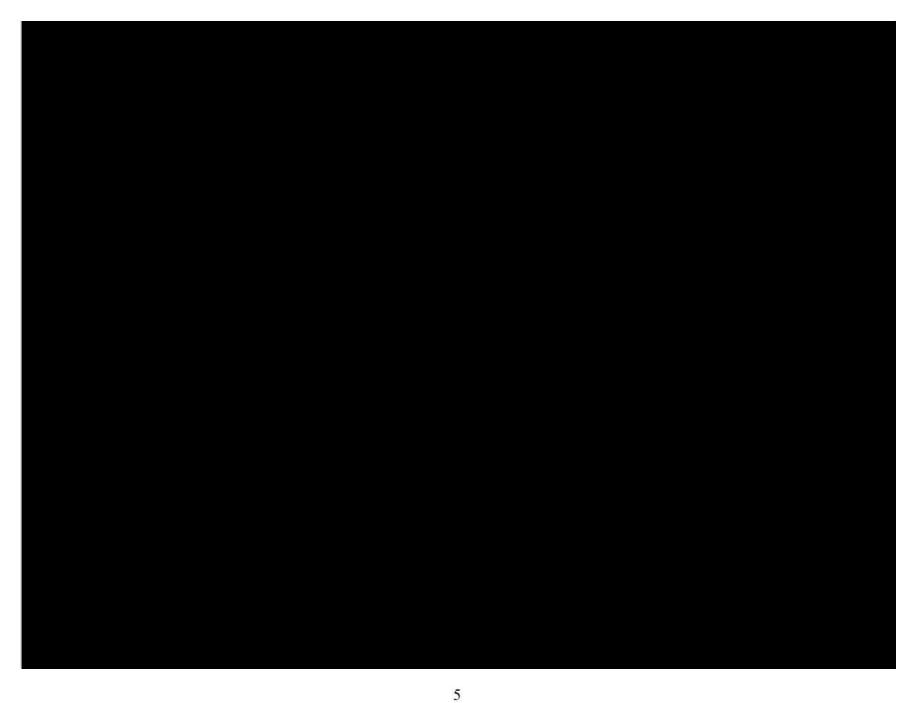
U.S. Patent 7,516,177 ('177 patent) **Great West Financial Claim Chart** 







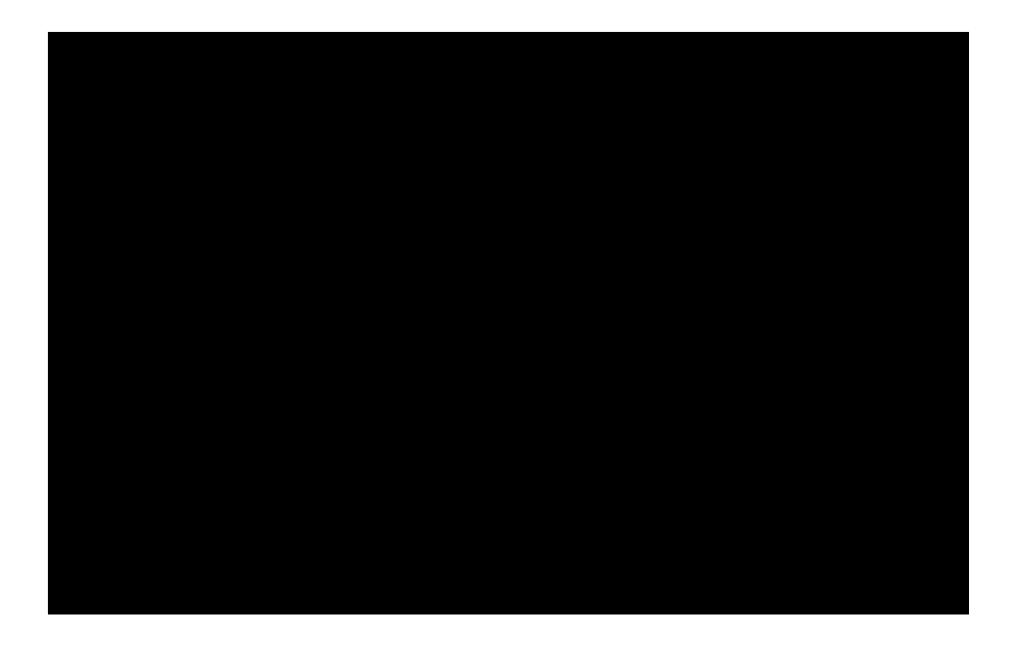


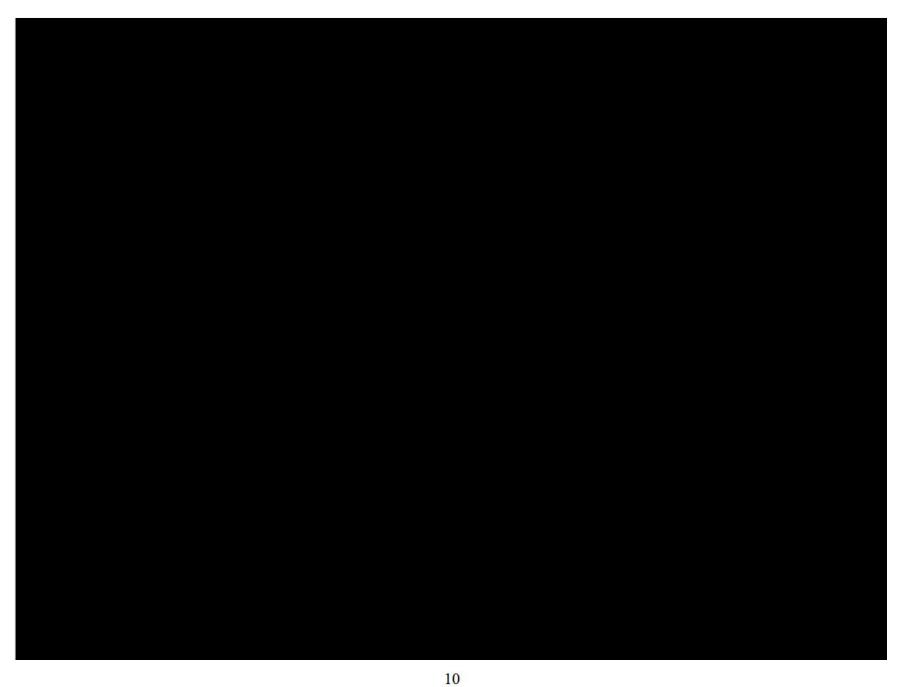








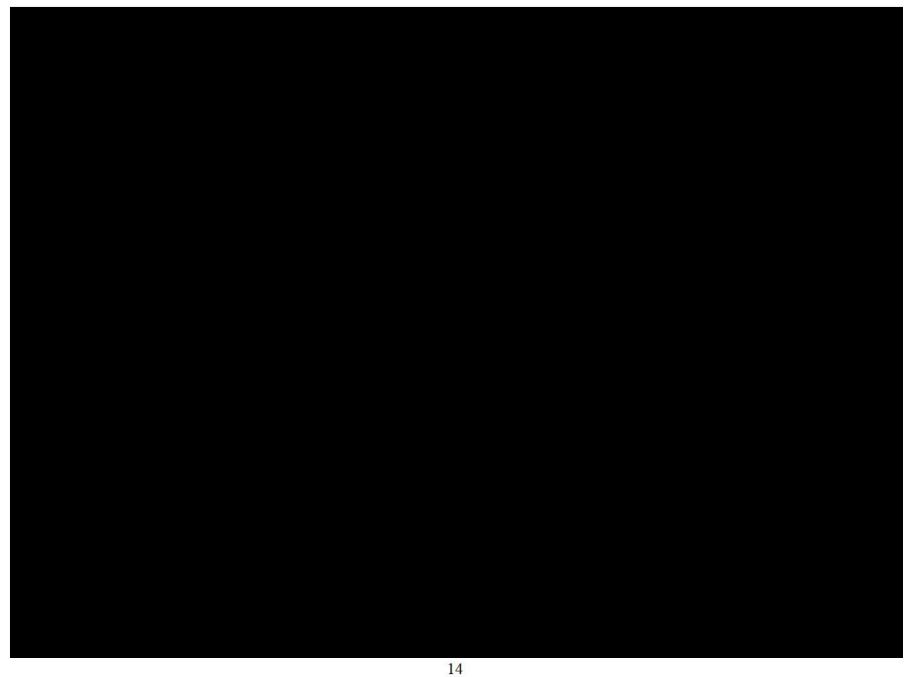


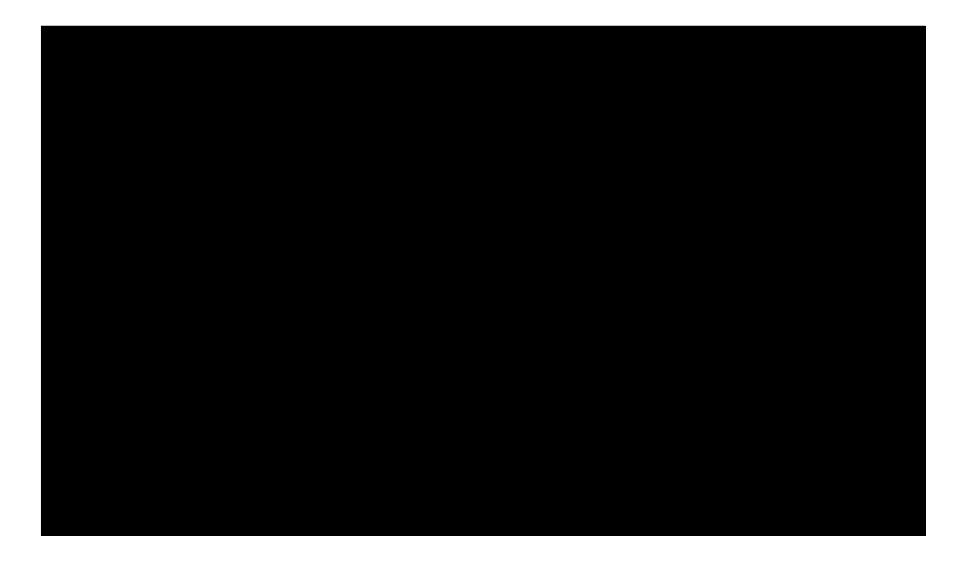










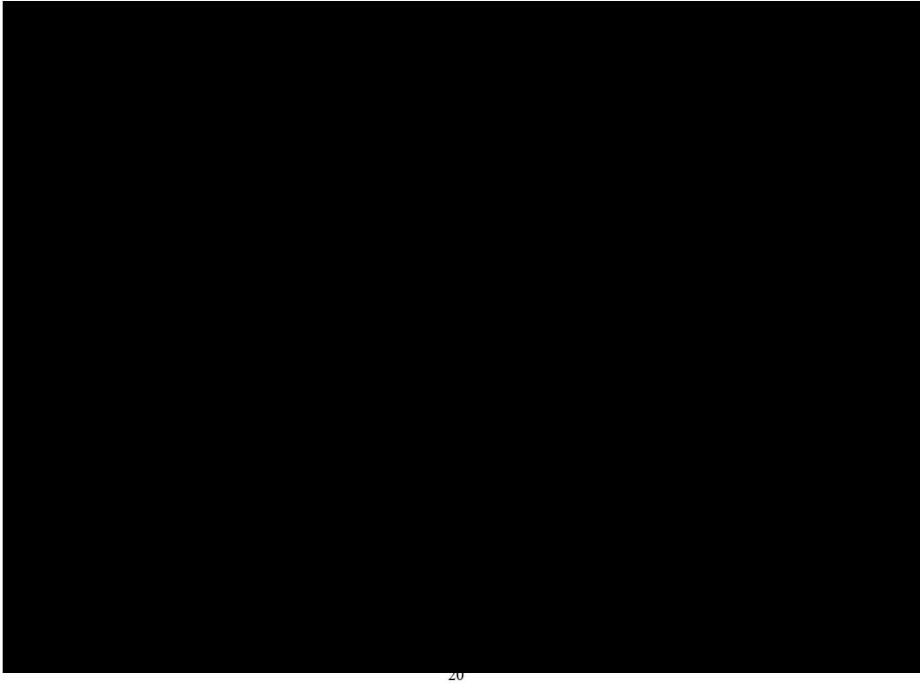












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